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To advance environmental and economic well-being by providing unmatched energy services, products, education and information based on world-class research.

About Us

Our staff of energy engineers, energy specialists, technical experts, software developers, and energy research librarians work out of our Olympia, Spokane and satellite offices.

Operating similar to a consulting firm, the WSU Energy Program is a self-supported department within the University.

Within WSU

As a part of the College of Agricultural, Human and Natural Resource Sciences, we report directly to the Dean of the College.

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Community Energy Efficiency Program in Washington State

The **Washington State University (WSU) Energy Program** executes and manages the Community Energy Efficiency Program (CEEP). Designated by the Washington State Legislature in 2009, CEEP provides support to homeowners and small businesses across the state so they can make energy efficiency upgrades to existing residences and commercial buildings.

CEEP focuses on households and businesses that have not been served by other energy efficiency enhancement programs, including:

- Moderate-income households;
- Rental housing;
- Manufactured housing;
- · Homes heated with oil, propane, and wood; and
- Small businesses.

To improve the quality and affordability of homes and small businesses in Washington State, CEEP partners provide consumer education and support to help homeowners and small business owners move forward with energy efficiency upgrades by:

- Providing CEEP incentives for upgrades,
- Helping participants qualify for utility conservation funds,
- Connecting to available financing for energy efficiency upgrades; and
- Encouraging participants to work with a specially trained and certified contractor workforce.

Delivering value to communities across the state

CEEP was created by the Washington State Legislature in 2009, and funded by the U.S. Department of Energy's State Energy Program and the American Recovery and Reinvestment Act. The eight community-based projects were charged with bringing value to their communities by testing innovative approaches to deliver energy efficiency upgrades to targeted residences and businesses.



Building on the momentum of the pilot, CEEP has developed into a mature program, with on-going support from the Washington State Legislature from 2009 through June 2015. CEEP efforts continue to focus on delivering unique value to Washington communities by stimulating investment in local economies, driving business to the energy efficiency workforce, and aiding residents and business owners in making upgrades to their buildings.

Assisting homeowners and renters

Since 2009, CEEP outreach activities have resulted in:

- Over 100,000 person-to-person contacts,
- Over 37,000 residential energy efficiency assessments, and
- Energy efficiency upgrades in over 30,000 homes.

These upgrades have been completed in three housing types:

- Single-family homes, including owneroccupied and rental homes,
- Multi-family units, and
- Manufactured homes.

Common residential energy efficiency upgrades

- Whole house air sealing and duct sealing
- Insulating attics, crawl spaces, walls, pipes and air ducts
- Installing/improving whole house ventilation systems
- Increasing efficiency of furnace/cooling systems
- Upgrading water-heating systems

Assisting small businesses

In the small business sector, over 2,000 businesses have been assessed and 1,300 upgrades have been completed. Outreach efforts to small business owners result in more efficient commercial buildings.



CEEP contractor installing insulation in a residential crawl space.

CEEP partners prepare a facility action plan to help building occupants learn about how their behaviors affect energy use and what they can do to change those energy use patterns.

Spotlight on CEEP communities

CEEP partners have developed customized approaches to reach potential clients in their local communities. A few outstanding programs are summarized here.

- Maximizing funding leverage in **Northern Puget Sound** – The Whatcom based Community Energy Challenge (CEC) leverages the current \$1.3 million CEEP investment with over \$2 million from the Northwest Clean Air Agency and funding from participating utilities. This funding leverage enables the CEC to expand beyond their pilot territory and increase customer participation. The CEC now includes services in Skagit, Island and San Juan counties. As a result, homeowners and small business investments in energy efficiency upgrades continue to multiply. The CEC provides each participating household and business with quality information, a full energy assessment, and a customized energy action plan that details cost-effective measures, assistance with utility and tax rebates, reliable contractors, and quality assurance standards.
- Targeting an underserved market throughout eastern and western Washington – Puget Sound Energy, Avista Utilities, and delivery partner UCONS, LLC,

continue to provide targeted services to manufactured housing residents. Duct sealing and floor insulation are paired with direct-install lighting upgrades and low-flow water fixtures to enhance energy efficiency and comfort. CEEP efforts have reduced ongoing homeowner operating costs for thousands of manufactured home occupants, resulting in substantial positive impact in this market sector.

 Aging in Place in Clark County – Clark Public Utilities focuses on fixed-income neighborhoods with their Aging in Place program. This program upgrades the insulation level if it does not meet current energy code requirements, and replaces inefficient heating/cooling systems to make homes more comfortable to live in and affordable to maintain over time. The Aging in Place program uses conservation funds from the utility paired with CEEP incentives to substantially reduce the cost burden for fixed-income residents.



Home weatherized through the Aging in Place program.

Supporting the state workforce

CEEP supports family-wage jobs by driving business to local contractors and ensuring that workers are paid prevailing wages. These contractors, in turn, refer customers to CEEP programs, which help customers access incentives to reduce the out-of-pocket cost of upgrading homes and small businesses.

CEEP is supported by the hard work and investment of over 130 contracting firms in Washington state.



To help contractors build capacity and capability to do energy efficiency work, the WSU Energy Program uses some CEEP funds to provide training and certifications to participating contractors around the state. Minimum training and certification standards include:

- Lead-safe work practices,
- Occupational Safety and Health Administration standards,
- Building Performance Institute standards,
- Performance Tested Comfort Systems standards, and
- Sales training.

Current CEEP funding has enabled over 600 building industry professionals to participate in training from July 2013 to December 2014.

Additional trainings are scheduled through June 2015. These opportunities include training and education for real estate professionals, appraisers, and home inspectors in addition to installation contractors and auditors.

Saving energy

CEEP delivered energy efficiency upgrades that have saved over \$3 million per year in energy costs. These efficiencies reduce ongoing operating costs for individual homeowners and small business owners.

CEEP upgrades can also include health and safety improvements, indoor air quality enhancements, and upgrades to ensure building durability over time.

CEEP upgrades are estimated to save over 178,000 million Btu each year – equal to the amount of energy used by 1,825 typical single-family homes in Washington.

Building on a successful track record

Current CEEP funding helps program partners meet the on-going market demand for energy efficiency services around the state, in urban centers and in distributed population areas. By continuing to test, assess and refine delivery approaches, CEEP provides:

- Opportunities for utilities to test new, innovative measures and approaches to conservation programs. As one example, Puget Sound Energy now provides incentives for floor insulation in manufactured homes.
- Customized services delivered by local organizations and the workforce to meet individual community needs. For example, moderate-income residents of Franklin, Walla Walla and Columbia counties now have an enhanced incentive available through the Sustainable Living Center, which supports households with incomes just above the threshold required for participating in the low-income weatherization program.



Community outreach campaign at a ferry terminal in the CEEP RePower service area.



CEEP contractor preparing to install energy efficient windows and weatherstripping.

• A framework for supporting local governmentled initiatives to meet municipal goals. For example, the City of Seattle and Kitsap County receive technical assistance and evaluation support to continue to meet local climate action goals.

Looking ahead

The CEEP partner organizations will continue to serve their communities through the end of the current funding period – June 30, 2015.

Even with the success of CEEP to date, there is still a lot of work to do. Significant market potential exists throughout the state.

If the Legislature continues to invest in CEEP's ongoing success, new work will focus on:

- Expanding into areas that are not currently supported with CEEP resources;
- Sustaining momentum generated in local economies and contractor business volume;
- Increasing the share of efficiency investment in moderate-income households, rentals, and homes heated with fuel oil, propane and wood; and
- Continuing work with utility, municipal and community partners to develop and test innovative approaches to reach underserved markets.